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EXAMINER	
NGUYEN, PHUONGCHI T	
ART UNIT	**PAPER NUMBER**
2833	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/711,475	BANKSTAHL, HERBERT A.	
	Examiner	Art Unit	
	Phuongchi Nguyen	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 March 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-109* is/are pending in the application.

4a) Of the above claim(s) *16-18,23,38-60,68,69,82-84,97,98,100 and 109* is/are withdrawn from consideratio

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15,19-22,24-37,61-67,70-81,85-96,99 and 101-108* is/are rejected.

7)☒ Claim(s) *35 and 37* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09/21/04* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAIL ACTION

1. Applicant's amendment of March 19, 2007 is acknowledged. It is noted that specie 2 (Figures 13-17), claims 1-15, 19-22, 24-37, 61-67, 70-81, 85-96, 99 and 101-108 has been selected.

2. The traversal of Specie 1, claims 16-18, 23, 38-60, 68-69, 82-84, 97-98, 100 and 109 on the grounds that all claims are consistent with product claims are not found persuasive and the claims are still subject to restriction.

Claims 16-18, 23, 38-60, 68-69, 82-84, 97-98, 100 are still withdrawn from further consideration by the examiner, 37 CFR 1. 142(b), as being drawn to a non-elected invention.

The requirement is still deemed proper and is therefore made FINAL.

Therefore, Claims 1-15, 19-22, 24-37, 61-67, 70-81, 85-96, 99 and 101-108 will be examined on the merit.

3. Based on the definition on the amendment of February 23, 2006, the well connector 44 is a cable adapter, a stem portion 56 is a welding device and a receptacle 42 is a device adapter.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore,

- a cable adapter and a device adapter in claim 19, lines 2 and 4.
- "the device adapter further comprises another recess extending into the body from the second end and **fluidly connected** to the first recess" in claim 21; and
- "the output connector has a path formed there through constructed to circular a cooling flow through the connector assembly" in claim 73,

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 21 and 73 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 21, line 3, it is unclear where is the "***another recess*** extending into the body from the second end and ***fluidly connected to the first recess***"?

- Claim 73, line 2, it is unclear where is "***a path*** formed there though constructed to circulate ***a cooling flow through the connector assembly***"? Therefore, claims 21 and 73 cannot be examined on the merit.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 61, lines 6-7, "first attaching means" and "second attaching means" raise issue of U.S.C. 112, 6th paragraph; because (1) the claim limitations must use the phrase "means for"; (2) the "means for" is modified by functional language.

9. Claim 106, lines 4-5, it is unclear how can "...a material ...having machineability of at least 75% of that of brass? The machineability does not have ability to have 75% of brass.

Claim Objections

10. Claim 96, line 1 is objected to because of the following informalities: Please change one of "the plug" to be a receiver, because "the plug" can not rotate relative to itself. Appropriate correction is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-4, 6-7, 11-12, 14-15, 61-63, 65-67, 85-89, 90 are rejected under 35 U.S.C. 102(b) as being anticipated by C.H. Stevens, Jr. (US2742622- herein after referred to as Stevens).

In regards to claim 1, Stevens discloses a high-power quick connector assembly comprising a first connector (12) having a stem portion (30) and a collar portion (18) (figure 5) connectable to a cable (16), the stem portion (30) having a shank segment (a portion of 30) extending an axial length of the stem portion (30) and a threaded segment (a portion of 40 and 42); and a second connector (10) having a recess (formed inside 62) formed therein, the recess (formed inside 62) constructed to receive the stem portion (30) of the first connector (12) and engage the shank segment (a portion of 30) and the threaded segment (a portion of 40, 42) (figure 1).

In regards to claims 2, 86 and 89, Stevens discloses the high-power quick connector assembly wherein the stem portion (30) of the first connector (12) further comprises a pair of planar surfaces (36, 38) (col. 2, lines 34-37) truncating opposing sides of the stem portion (30).

In regards to claim 3, Stevens discloses the high-power quick connector assembly wherein the first connector (12) is rotatable relative to the second connector (10).

In regards to claim 4, Stevens discloses the high-power quick connector assembly wherein the first connector (12) is rotatable relative to the second connector (10) by approximately 90 degrees, (the first 12 and second 10 connectors can rotate from 1^0 to 180^0).

In regards to claims 6 and 85, Stevens discloses the high-power quick connector assembly wherein the second connector (10) further comprises a threaded section (68, 70) formed about a distal end of the recess (formed inside 62) (figure 1).

In regards to claims 7 and 88, Stevens discloses the high-power quick connector assembly wherein the recess (formed inside 62) of the second connector (10) further comprises a generally circular section (62) constructed to receive the shank segment (a portion of 30) of the first connector (12) (figure 1).

In regards to claim 11, Stevens discloses the high-power quick connector assembly further comprising at least one shoulder (1st thread from the end of 30) extending about the shank segment (a portion of 30) of the stem portion (30) of the first connector (12).

In regards to claim 12, Stevens discloses the high-power quick connector assembly wherein the recess (formed inside 62) of the second connector (10) has a groove (1st groove forming by a 1st thread 68, 70 formed inside 62) formed there about constructed to engage the at least one shoulder (1st thread 40, 42 of 30) of the shank segment (a portion of 30) of the first connector (12) (figure 3).

In regards to claim 14, Stevens discloses the high-power quick connector assembly wherein at least one shoulder (1st thread of 30) of the stem portion (30) of the first connector (12) mechanically and electrically connects to the second connector (10) and the threaded segment (a portion of 40, 42) of the stem portion (30) of the first connector (12) mechanically and electrically connects to the second connector (10) (figure 1).

In regards to claims 15 and 87, Stevens discloses the high-power quick connector assembly wherein the recess (formed inside 62) of the second connector (10) further comprises a thread portion (68, 70) having at least one channel (entrance hole) formed there across, the at least one channel (entrance hole) constructed to allow the at least one shoulder (1st thread of 30) to pass there through (figure 1).

In regards to claim 61, Stevens discloses the high-power quick connector assembly for a welding-type apparatus comprising:

means (housing/opening of 12) for receiving a cable (16);

means (of 12) for connecting the receiving means (housing/opening of 12) to a power source, the means (of 12) for connecting including: first attaching means (of 30) having a contact

surface area (on 30); and second attaching means (of receptacle 10/of recess inside 62) having a contact surface area (inside 62) that is greater than the contact surface area (on 30) of the first attaching means (of 30).

In regards to claim 62, Stevens discloses the high-power quick connector assembly wherein the second attaching means (of receptacle 10/of recess inside 62) includes a plurality of threads (68, 70) about the contact surface area (on 68, 70) of the second attaching means (of receptacle 10/of recess inside 62).

In regards to claim 63, Stevens discloses the high-power quick connector assembly wherein the receiving means (housing/opening of 12) further comprises first securing means (of thread 40, 42) for engaging the first attaching means (of 30) and second securing means (of thread 68, 70) for engaging the second attaching means (of receptacle 10/of recess inside 62).

In regards to claim 65, Stevens discloses the high-power quick connector assembly wherein the contact surface area (of thread 40, 42, 36, 38) of the first attaching means (of 30) is generally smooth (36, 38) and has at least one lip (a first thread of thread 40, 42) extending about a circumference at an end thereof (fig. 1).

In regards to claim 66, Stevens discloses the high-power quick connector assembly wherein the at least one lip (a first thread of thread 40, 42) of the first attaching means (of 30) is constructed to engage the first securing means (of thread 40, 42) to the second securing means (of thread 68, 70) and the second securing means (of thread 68, 70) has a plurality of threads (68, 70) formed thereabout constructed to engage a plurality of threads (40, 42) formed about the second attaching means (of receptacle 10/of recess inside 62).

In regards to claim 67, Stevens discloses the high-power quick connector assembly wherein the first attaching means (of 30) has a diameter (of 18) that is larger than a common

diameter (of recess 62) of the second attaching means (of receptacle 10/of recess inside 62) and the diameter (of 18) is located further from an end of the connecting means (of 12) than the second attaching means (of receptacle 10/of recess inside 62).

In regards to claim 90, Stevens discloses the cable connector (12) is engageable with the receptacle (10) from an inserted position to a (initially) locked position with a single grip rotation therebetween.

In regards to claim 22, Stevens discloses the quick connector assembly of claim 21 wherein the body of the device adapter (10) further comprise a first threading (1st thread of 68) formed about an outside surface about the second (mating) end and a second threading (1st thread of 70) formed about a circumference of the another end.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claims 8, 10, 19, 24-32, 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over C.H. Stevens, Jr. (US2742622- herein after referred to as Stevens) in view of Double (US3736548).

In regards to claim 8, Stevens discloses the high-power quick connector assembly wherein the first connector (12) is attached to a cable (16) and the second connector (10) is rigidly attached to the device (another mating device). Stevens discloses the invention substantially general as claimed, but lacks a welding cable. However, Double teaches a weld cable (col. 8, line 7-8). It would have been obvious to one having ordinary skill at the time the

invention was made to modify the connector cable of Stevens by having a welded cable as taught by Double for increasing the connection between the cable and the quick connector assembly.

In regards to claims 10 and 64, Stevens discloses the invention substantially general as claimed, but lacks to disclose the level of temperature and the amount of flow current. It would have been obvious to one having ordinary skill at the time the invention was made to provide on the connector assembly of Stevens a temperature change of less than approximately 40 degrees when subjected to a current of approximately 700 amps to prevent overheating.

In regards to claim 19, Stevens discloses a quick connector assembly for a device comprising a cable adapter (12) connectable to a cable (16) and having a cable end (44) and a device end (30); a device adapter (10) constructed to engage the device end (30) of the cable adapter (12) and the device adapter (10) comprising a body (of 62 or 10) having a first (mating) end and a second (cable) end (which connects to the cable end 22); a recess (formed inside 62) extending into the body (of 10) from the first (mating) end; a threaded section (of 68, 70) formed in the recess (formed inside 62) proximate the first (mating) end; a smooth section (66, 64) formed in the recess (formed inside 62) between the threaded section (of 68, 70) and the second (cable) end (fig. 1). Stevens discloses the invention substantially general as claimed, but lacks a welding cable. However, Double teaches a weld cable (col. 8, line 7-8). It would have been obvious to one having ordinary skill at the time the invention was made to modify the connector cable of Stevens by having a welded cable as taught by Double for increasing the connection between the cable and the quick connector assembly.

In regards to claim 24, Stevens discloses the quick connector assembly wherein the device adapter (10) further comprises a ledge (60) formed in the recess (formed inside 62) generally between the threaded section (of 68, 70) and the smooth section (66, 64).

In regards to claim 25, Stevens discloses the quick connector assembly wherein the device adapter (10) further comprises a first charnel (on 66) and a second channel (on 64) extending axially through the threaded section (of 68, 70) formed in the recess (formed inside 62).

In regards to claim 26, Stevens discloses the quick connector assembly wherein the first (on 66) and second channels (on 64) are on generally opposed sides of the threaded section (of 68, 70) of the recess (formed inside 62) (fig. 1).

In regards to claim 27, Stevens discloses the quick connector assembly wherein the device end (30) of the cable adapter (12) further comprises an unthreaded portion (36, 38) and a threaded portion (40, 42) (col. 2, lines 34-37).

In regards to claim 28, Stevens discloses the quick connector assembly wherein the - unthreaded portion (36, 38) is closer to an end of the cable adapter (12) than the threaded portion (40, 42). "an end of the cable adapter" is defined by the viewer's position.

In regards to claims 29 and 30, "to be connected to a device capable of outputting a power signal suitable for welding" and "to communicate the power signal to the welding cable" are not positively recited in the claim.

In regards to claim 31 and 91, Stevens discloses the quick connector assembly wherein the cable adapter (12) and the device adapter (10) are fully connectable within one wrist-turn rotation therebetween.

In regards to claim 32, Stevens discloses the quick connector assembly wherein the threaded section of the recess of the device adapter (10) has a pair of channels (on 66, 64) extending across the threaded section (of 68, 70), the channels (on 66, 64) having a diameter

similar to a diameter of the smooth section (66, 64) formed in recess (formed inside 62) and less than an inner diameter of the threaded section (of 68, 70) (fig. 1).

In regards to claim 33, Stevens discloses the quick connector assembly wherein the welding device end (30) of the cable adapter (12) includes a shouldered shank (a mating end portion of 30) at an end thereof and a threaded section (of 40, 46; the section after a 1st thread of 30) between the shouldered shank (a mating end portion of 30) and the cable end (44) of the cable adapter (12).

In regards to claim 34, Stevens discloses the quick connector assembly wherein the shouldered shank (a mating end portion of 30) includes a pair of shoulders (a pair of the 1st thread from the end of 30) extending from generally opposite sides thereof (because the portion 30 has a pair of threads 40, 42, opposite to the pair of the planar surfaces 36, 38).

Claims 35, 36 are rejected for the same reason of claims 2 and 27.

15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over C.H. Stevens, Jr. (US2742622- herein after referred to as Stevens) in view of Double (US3736548) applied as claim 1 above, and further in view of EP241121A2 (has equivalent US Patent Cusick, III et al 4702539).

In regards to claim 5, Stevens discloses the invention substantially general as claimed, but lacks a plurality of threaded holes formed in the collar portion. However, EP241121A2 teaches a threaded hole (adjacent to reference numeral 14) is formed in the collar portion of the first connector (18) (figure 1). It would have been obvious to one having ordinary skill at the time the invention was made to modify the connector assembly of Stevens by having a thread hole in the first connector body as taught by EP241121 for securing the collar of the first connector to the outer housing of the connector assembly.

16. Claims 9, 20, 70-72, 74, 76-81, 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over C.H. Stevens, Jr. (US2742622- herein after referred to as Stevens) in view of Double (US3736548) applied as claim 1 above, and further in view of G.W.Lecocq (US3491329).

In regards to claims 9, 20, 70 and 92, Stevens discloses the invention substantially general as claimed, but lacks of connector being constructed by a tellurium copper material. However, G.W.Lecocq teaches the socket connector is constructed from at least one of a tellurium copper material (col. 3, lines 31-32). It would have been obvious to one having ordinary skill at the time the invention was made to modify the connector assembly of Stevens by having one of the connector being constructed by a tellurium copper material as taught by G.W.Lecocq for increasing conductivity in the connector.

In regards to claim 71, Stevens discloses the connector assembly wherein the output connector (10) (receptacle) is engageable with the cable connector (12)(plug) from an initial position to a fully engaged position in less than 180 degrees of rotation.

In regards to claim 72, "wherein the power source is constructed to generate a power signal suitable for welding with up to approximately 700 amps" is not positively recited in the claim.

In regards to claim 74, Stevens discloses an insulator (26) positioned about the output connector (10) (receptacle connector) (fig. 1). "constructed to be secured to a housing positioned about the power source" is not positively recited in the claim.

In regards to claim 76, Stevens discloses the cable connector (12) further comprises a cable portion (of 16) connectable to the cable (16) and a stud portion (stem portion 30) engageable with the output connector (receptacle connector 10), the stud portion (30) having an

unthreaded portion (36, 38) (col. 2, lines 34-37) and a threaded portion (40, 42) (fig. 1).

In regards to claim 77, Stevens discloses the output connector (10) further comprises an unthreaded portion (64, 66) constructed to engage the unthreaded portion (36, 38) of the cable connector (12) and a threaded portion (68, 70) constructed to engage the threaded portion (40, 42) of the cable connector (12).

In regards to claim 78, Stevens discloses the unthreaded portion (36,38) of the cable connector (12) further comprises a pair of shoulders (1st thread 40, 1st thread 42 of 30) of extending therefrom constructed to snuggly engage the unthreaded portion (64, 66) of the output connector (10) upon rotation therebetween.

In regards to claim 79, Stevens discloses the threaded portion (68, 70) of the output connector (10) further comprises a pair of channels (on unthread portion 66, 64; between thread portions 68, 70) constructed to allow uninterferred passage (between 1st thread 40 and 1st thread 42 of 30) of the pair of shoulders (1st thread 40, 1st thread 42 of 30) of the cable connector (12) through the threaded portion (68, 70) of the output connector (10).

In regards to claim 80, Stevens discloses the cable connector (12) is not rotatable relative to the output connector (10) when the pair of shoulders (1st thread 40, 1st thread 42 of 30) arc generally aligned with the threaded portion (68, 70) of the output connector (10)(initially).

In regards to claim 81, Stevens discloses an outer diameter of the pair of shoulders (1st thread 68, 1st thread 70 of 10) is greater than an outer diameter of the threaded portion (40, 42) of the stud portion (stem portion 30) of the cable connector (12) (fig. 1).

17. Claims 13, 91, 93 and are rejected under 35 U.S.C. 103(a) as being unpatentable over C.H. Stevens, Jr. (US2742622- herein after referred to as Stevens) in view of Double (US3736548) applied as claim 11 above, and further in view of Cusick, III et al (US4702539).

In regards to claims 13 and 91, Stevens discloses the high-power quick connector assembly wherein the recess (formed inside 62) of the second connector (10) has a first diameter (1st diameter is on 10, which is corresponding to the 1st thread of 30) similar to a diameter proximate the at least one shoulder (1st thread of 30) of the shank end (of 30) of the first connector (12), a second diameter (2sd thread of 30) is similar to a diameter (of 1st thread) of the thread end (of 30) of the stem portion (30) of the first connector (12) (figure 1). Stevens discloses the invention substantially general as claimed, but lacks the first diameter of the recess being greater than the second diameter of the recess. However, Cusick, III et al teach the first diameter (inner side walls of 26) of the recess (26) is greater than the second diameter (forming by inner side of protrusion 28 and opposite side wall of 26) of the recess (26) (figures 3 and 4). It would have been obvious to one having ordinary skill at the time the invention was made to provide on the connector assembly of Stevens the first diameter of the recess being greater than the second diameter of the recess as taught by Cusick, III et al for guiding and locking the second connector into the first connector.

In regards to claim 93, in view of claim 13, Stevens further discloses a receiver (10) configured to be connected to a welding-type device (12) and having a first tubular section (of 24) having a diameter and a second tubular section (of 26) having a diameter greater than the diameter of first tubular section (of 24); a plug (body of 30) constructed to be connected to a weld cable (16) and having a stud (30), the stud (30) having a first outer diameter (of 32) substantially similar to the diameter of the first tubular section (of 24) of the receiver (10), and a second outer diameter (of 30) substantially similar to the diameter of the second tubular section (of 26) of the receiver (10), the second outer diameter (of 30) of the stud (30) having a plurality of threads (40, 42) formed thereabout.

In regards to claim 94, Stevens discloses the high-power quick connector assembly wherein a plurality of threads (40, 42) formed about the second tubular (mating) section of the receiver (12) and constructed to engage the plurality of threads (40, 42) of the stud (stem portion 30) (fig. 1).

In regards to claim 95, Stevens discloses the rotation of the plug (body of 30) relative to the receiver (10) engages the threads (68, 70) of the receiver (10) with the threads (40, 42) of the plug (body of 30) in a locking fashion (by the threads) (fig. 1).

In regards to claim 96, Stevens discloses the plug (body of 30) is rotatable relative to the receiver (10) by approximately 90 degrees (fig. 1).

In regards to claim 99, Stevens discloses the (2sd) threads (40, 42) about the second outer diameter of the stud (30) are truncated on opposing sides of the second outer diameter (of 30)(fig. 1).

In regards to claim 101, Stevens discloses the plug (body of 30) further comprises an orifice (44; opening or aperture where cable 16 is connected) constructed to receive the cable (16) therein. The weld cable is rejected for the same reason of claim 8. .

Claims 102, 103 and 105 are rejected for the same reason of claims 10, 13 and 9.

In regards to claim 104, Stevens discloses the high-power quick connector assembly wherein the plug (body of 30) rotatable relative to the receiver (10) from an initial position to a fully engaged position upon approximately 90 degrees of rotation wherein rotation of the plug (body of 30) engages the plurality of threads (40, 42) of the plug (body of 30) with a plurality of threads (68, 70) of the receiver (10).

18. Claims 106-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over G.W.Lecocq (US3491329- herein after referred to as Lecocq) in view of Stevens (US2742622).

In regards to claim 106, Lecocq discloses a quick-connect connector assembly comprising a first connector (10) electrically connectable to a second connector (18); at least one of the first (10) and the second connector (18) are constructed from a material having an electrical conductivity made copper and having a machine-ability of brass (col. 3, lines 31-32 and/or 34-35). Lecocq discloses the invention substantially general as claimed, but lacks to disclose the amount of copper and brass materials on the connectors and the rotation of the first connector connecting to the second connector. It would have been obvious to one having ordinary skill at the time the invention was made to provide on the connector assembly of Lecocq the amount of copper such as 80% and brass materials such as 75% on the connectors for the purpose of the user needed; since the amount of copper and brass materials are to increases the conductivity in the connectors; and by having the thread segment as taught by Stevens for rotation the first connector into the second connector to increasing more security between the two connector bodies.

In regards to claim 107, Stevens discloses the invention substantially generally as claimed, but lacks the material has a yield strength of at least 40 Kpsi. It would have been obvious to one having ordinary skill at the time the invention was made to provide on the connector assembly of Lecocq the material having yield strength of at least 40 Kpsi for greater durability.

In regards to claim 108, Stevens discloses the quick connect connector assembly wherein the first connector (12) rotatably engages the second connector (10) from an insert position to a fully engaged position in less than approximately 180 rotational degrees from the insert position.

Allowable Subject Matter

19. Claims 37 and 75 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

20. The following is a statement of reasons for the indication of allowable subject matter:

In regards to claim 37, the prior art fails to show the high-power quick connector assembly wherein the an outer diameter of the shouldered shank is greater than an outer diameter of the threaded section of the cable adapter and is greater than an inner diameter of the threaded section of the device adapter.

In regards to claim 75, the prior art fails to show the high-power quick connector assembly having the boss of the first body of the insulator constructed to engage and be snuggly received in the recess of the second body.

Response to Arguments

21. Applicant argues that" The Examiner made no attempt to show that the species are distinct under any section of MPEP §806.05 - §806.050). Additionally, the Examiner "must explain why there would be a serious burden on the examiner if restriction is not required." MPEP §808.02. The Examiner may show a serious burden by separate classification, separate status in the art, or a different field of search" is not deemed persuasive.

Applicant clearly discloses one embodiment (specie 1) in figures 2 through 12 (claims 1-19; species 2 does not have a channel on the stem portion; and a separate embodiment (specie 2) in figures 13 through 17. This is further evident by the language at the beginning of paragraph 54, which states "Regardless of which of the above embodiments is employed..." The examiner has identified additional embodiments (species), not from applicant's claims, but rather from applicant's description. Applicant's comments require the examiner completely ignore the

language of the specification that clearly sets forth different embodiments, and not just "different definitions of the same disclosed subject matter, varying in breadth and scope." This line of reasoning is inconsistent with the language of paragraph 56, which reads "In another embodiment of the present invention..." (Claims 19-41; species 2 does not have a device adapter); the language of paragraph 57 which states "An alternate embodiment of the present invention..." (claims 85-105 and 109; species 2 does not have the torch); the language of paragraph 58 which sets forth "A further embodiment of the present invention..." (Claims 42-46; species 2 does not have a surface area of the first engagement portion to be less than a surface area of the second engagement portion); the language of paragraph 59 reciting " Another embodiment of the present invention..." (Claims 47-60; species 2 does not have receiving a first internal profile and a second internal profile and forming a plug with a first external profile constructed to pass the second internal profile of the receiver); the language of paragraph 60 which refers to "An additional embodiment of the present invention..." (Claims 61-69; species 2 does not have the connecting the receiving means to a power source); and lastly the language of paragraph 61 which reads "Another embodiment of the present invention..." (Claims 70-84; species 2 does not have the output connector to generate a power signal). The only reasonable conclusion of this verbiage is that applicant is attempting to describe alternative species in these paragraphs, and not different definitions of the same subject matter.

22. "The Examiner has not shown that the search for Species 1 and 2 would include searching different classes/subclasses or employing different search queries as set forth in MPEP §808.02" is not deemed persuasive. There is no need to show the classes/ different subclasses because a separate status in the art when they are classifiable together ...each invention can be

shown to have formed a separate subject for inventive effort when the examiner can show a recognition of separate inventive effort by inventors... MPEP § 806.05 (b)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchi Nguyen whose telephone number is (571) 272-2012. The examiner can normally be reached on 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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PCN

May 22, 2007

TULSIDAS C. PATEL
SUPERVISORY PATENT EXAMINER